APPLICANT(S): Meron, Gavriel et al.

SERIAL NO.: 10/046,541

FILED:

January 16, 2002

Page 2

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1-50. (Cancelled)

- 51. (New) An in vivo device comprising:
 - a plurality of optical windows behind which are positioned, at least, an illumination source and an imager, said optical windows facing different directions.
- 52. (New) The device according to claim 51 wherein said windows are arranged in opposing directions.
- 53. (New) The device according to claim 51 wherein each window is dome shaped.
- 54. (New) The device according to claim 51 comprising a lens positioned behind the optical windows.
- 55. (New) The device according to claim 51 comprising a lens positioned between an imager and an optical window.
- 56. (New) The device according to claim 51 comprising a plurality of illumination sources and a plurality of imagers, wherein an illumination source and an imager are positioned behind each optical window.
- 57. (New) The device according to claim 51 comprising a transmitter.
- 58. (New) The device according to claim 57 wherein the transmitter transmits over a single channel.
- 59. (New) The device according to claim 57 wherein the transmitter transmits over multiple channels.
- 60. (New) The device according to claim 51 wherein the device is capsule shaped.
- 61. (New) A system for in vivo imaging, said system comprising:

an in vivo imaging device, said device containing within it at least:

a plurality of imagers facing different directions and an illumination source; and

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Page 3

an external receiver for receiving signals from the in vivo imaging device.

- 62. (New) The system according to claim 61 wherein the in vivo imaging device comprises a transmitter.
- 63. (New) A method for in vivo imaging of a body lumen, the method comprising the steps of:

illuminating in vivo sites from behind at least two optical windows; obtaining images of the in vivo sites; and transmitting signals from within the body lumen.

- 64. (New) The method according to claim 63 comprising the step of illuminating the in vivo sites from different directions.
- 65. (New) The method according to claim 63 comprising obtaining images of the in vivo sites from at least two imagers.
- 66. (New) The method according to claim 63 comprising obtaining images from a front and from a rear of an in vivo imaging device.
- 67. (New) The method according to claim 63 comprising transmitting signals over a radio channel.
- 68. (New) An in vivo device comprising:
 - a plurality of illumination sources and a plurality of imagers; and a plurality of optical domes, behind each of which are positioned an illumination source and an imager, each of said optical domes facing opposite directions.
- 69. (New) The device according to claim 68 comprising a lens positioned between an imager and an optical dome.
- 70. (New) The device according to claim 68 comprising a transmitter.
- 71. (New) The device according to claim 68 wherein said device is capsule shaped.